

REMARKS

Claims 13-24 are pending in the application. Claims 2-12 were rejected under 35 U.S.C. § 112, second paragraph, as described on page 2 of the Office Action. Claims 1-12 were rejected under 35 U.S.C. § 102 as described on page 2 of the Office Action. Claims 13, 14, 16, 18, 21 and 24 are the only independent claims.

It is respectfully submitted that the outstanding rejections of claims 1-12 are moot, as the claims have been cancelled.

It is respectfully submitted that claims 13-24 comply with 35 U.S.C. § 112, second paragraph, for the following reasons.

Page 2 of the Office Action asserts that it is "unclear/vague what is represented by 1) "solution growth" as claimed."

As described in MPEP § 217.02, definiteness of a claim language must be analyzed, not in a vacuum, but in light of:

- A) the content of the particular application disclosure;
- B) the teachings of the prior art;
- C) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In light of the above discussion, it is respectfully submitted that the word "solution" is not vague or unclear and the word "growth" is not vague or unclear. Furthermore, it is respectfully submitted that one of ordinary skill in the art would understand the phrase "solution growth" and further, that the recitation thereof is not repugnant to its ordinary meaning.

Page 2 of the Office Action further asserts that it is unclear/vague "how the nonlinear optical crystal performs wavelength conversion i.e. there is no structure to support a wavelength conversion device except a crystal."

As indicated above, definiteness of the claim language must be analyzed in light of, *inter alia*, teachings of the prior art, and interpretation that would be given by one possessing ordinary level of skill in the pertinent art at the time the invention was made. In the present case, it is respectfully submitted that one of ordinary skill in the art would know how a nonlinear optical crystal performs wavelength conversion. More specifically, one of ordinary skill in the art would understand that a nonlinear medium is characterized by a nonlinear relation between the polarization density of the medium and electric field within the medium. Furthermore, one of ordinary skill in the art would understand that a nonlinear optical crystal performs wavelength conversion based on a Born approximation wherein an optical field incident on a nonlinear optical crystal creates a radiation source that radiates a second optical field.

In light of the above discussion, it is respectfully submitted that claims 13-24 comply with 35 U.S.C. § 112, second paragraph.

Attached hereto is an English translation of the priority document for the above-identified application, accompanied with a statement verifying the accuracy of the translation. It is respectfully submitted that each of claims 13-24 are fully supported by the translation.

It is noted that the Ning Ye reference has an effective reference date of May 1999, which is after the priority date of the present application, namely August 4, 1998. Accordingly, it is respectfully submitted that Ning Ye is not applicable as prior art within the meaning of 35 U.S.C. § 102. Accordingly, it is respectfully submitted that claims 13-24 are patentable over the prior art of record.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

Takatomo SASAKI et al.

By: 
Thomas D. Robbins
Registration No. 43,369
Attorney for Applicants

TDR/abm/jlg
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
August 29, 2003